

# EXHIBIT 1

**2010**

**Step 2**  
**Clinical Skills (CS)**

**Content Description**  
**and General Information**



A Joint Program of the Federation of State  
Medical Boards of the United States, Inc.,  
and the National Board of Medical Examiners®



## CONTENTS

Introduction . . . . .	3
Step 2 CS Case Development . . . . .	4
Standardized Patient–Based Examinations . . . . .	4
Examination Blueprint . . . . .	4
Description of the Examination . . . . .	5
Examination Length . . . . .	6
Equipment and Examinee Instructions. . . . .	6
The Patient Encounter . . . . .	6
Physical Examination . . . . .	7
Telephone Patient Encounters . . . . .	8
The Patient Note . . . . .	8
Other Case Formats . . . . .	8
Testing Regulations and Rules of Conduct. . . . .	9
Irregular Behavior. . . . .	9
Scoring the Step 2 CS Examination . . . . .	10
Scoring of the Step 2 Clinical Skills Subcomponents . . . . .	10
2009 Step 2 CS Score Report Schedule . . . . .	11
Terms Used in the Step 2 CS Examination . . . . .	12
Common Abbreviations for the Patient Note . . . . .	13
Appendix A: Patient Note . . . . .	14
Appendix B: Patient Note Screen . . . . .	15
Appendix C: Sample Patient Note Styles . . . . .	16
Appendix D: Clinical Skills Evaluation Center Addresses. . . . .	19

## INTRODUCTION

The United States Medical Licensing Examination (USMLE), through its three Steps (Step 1, Step 2, and Step 3), assesses a physician's ability to apply knowledge, concepts, and principles, and to demonstrate fundamental patient-centered skills that are important in health and disease and that constitute the basis of safe and effective patient care.

Results of the USMLE are reported to medical licensing authorities in the United States and its territories for use in granting the initial license to practice medicine. The USMLE is sponsored by the Federation of State Medical Boards (FSMB) and the National Board of Medical Examiners (NBME).

Step 2 of the USMLE assesses the ability of examinees to apply medical knowledge, skills, and understanding of clinical science essential for the provision of patient care under supervision, and includes emphasis on health promotion and disease prevention. Step 2 ensures that due attention is devoted to the principles of clinical sciences and basic patient-centered skills that provide the foundation for the safe and effective practice of medicine.

There are two components of Step 2, Clinical Knowledge (CK) and Clinical Skills (CS). Step 2 CK uses the multiple-choice examination format to test

clinical knowledge. Step 2 CS uses standardized patients to test medical students and graduates on their ability to gather information from patients, perform physical examinations, and communicate their findings to patients and colleagues.

This document is intended to help examinees prepare for the Step 2 CS component of the USMLE. Persons preparing to take the Step 2 CS examination should also view the video available at the USMLE website ([www.usmle.org](http://www.usmle.org)).

Information on eligibility, registration, and scheduling is available in the USMLE *Bulletin of Information*, which is posted on the USMLE website. Students and graduates of international medical schools must also consult the ECFMG *Information Booklet* and the ECFMG website ([www.ecfm.org](http://www.ecfm.org)).

The information in this document, as well as other materials, is available at the USMLE website and also via CD from your registration entity. Changes in the USMLE program may occur after the release of this document. **If changes occur, information will be posted on the USMLE website. You must obtain the most recent information to ensure an accurate understanding of current USMLE policy.**

## STEP 2 CS CASE DEVELOPMENT

### Standardized Patient–Based Examinations

The patients you will see are people trained to portray a clinical problem. This method of assessment is referred to as a standardized patient examination. Most medical school programs in the United States and Canada accredited by the Liaison Committee on Medical Education (LCME) use standardized patients for instruction; many of these institutions use standardized patients for evaluation as well.

Standardized patients have been used since 1998 in the ECFMG Certification process, and have also been incorporated into the Medical Council of Canada's medical licensure examination for Canadian and international medical graduates. The standardized patient–based testing method was established more than 35 years ago, and its procedures have been tested and validated in the United States and internationally.

### Examination Blueprint

As part of the test development process, practicing physicians and medical educators develop and review cases to ensure that they are accurate and appropriate. These cases represent the kinds of patients and problems normally encountered during medical practice in the United States. Most cases are specifically designed to elicit a process of history taking and physical examination that demonstrates the examinee's ability to list and pursue various plausible diagnoses.

The cases that make up each administration of the Step 2 CS examination are based upon an examination blueprint. An examination blueprint defines the requirements for each examination, regardless of where and when it is administered. The sample of cases selected for each examination reflects a balance of cases that is fair and equitable across all exami-

nees. On any examination day, the set of cases will differ from the combination presented the day before or the following day, but each set of cases has a comparable degree of difficulty.

The intent is to ensure that examinees encounter a broad spectrum of cases reflecting common and important symptoms and diagnoses. The criteria used to define the blueprint and create individual examinations focus primarily on presenting complaints and conditions.

Presentation categories include, but are not limited to, cardiovascular, constitutional, gastrointestinal, genitourinary, musculoskeletal, neurological, psychiatric, respiratory, and women's health. Examinees will see cases from some, but not all, of these categories. The selection of cases is also guided by specifications relating to acuity, age, gender, and type of physical findings presented in each case.

Your Step 2 CS administration will include twelve patient encounters. These include a very small number of nonscored patient encounters, which are added for pilot testing new cases and other research purposes. Such cases are not counted in determining your score.

When you take the Step 2 CS examination, you will have the same opportunity as all other examinees to demonstrate your clinical skills proficiency. The examination is standardized, so that all examinees receive the same information when they ask standardized patients the same or similar questions. An ongoing mechanism of quality control is employed to ensure that the examination is fair to all. The quality control approach focuses on consistency in portrayal and scoring of the individual cases, and utilizes both observation of live encounters and review of digital recordings.

## DESCRIPTION OF THE EXAMINATION

When you arrive at the test center on the day of your examination, bring the Scheduling Permit you received when your registration was completed, your Confirmation Notice, and an unexpired, government-issued form of identification that includes a photograph and signature, such as a current driver's license or passport. Your name as it appears on your Scheduling Permit must match the name on your form(s) of identification exactly. The only acceptable differences are variations in capitalization; the presence of a middle name, middle initial, or suffix on one document and its absence on the other; or the presence of a middle name on one and middle initial on the other.

**If you do not bring acceptable identification, you will not be admitted to the test.** In that event, you must pay a fee to reschedule your test. Your rescheduled test date(s) must fall within your assigned eligibility period.

The time you should arrive at the test center is listed in the Confirmation Notice you will print after scheduling your appointment.

Please note that, as part of the Step 2 CS registration process, you acknowledge and agree to abide by USMLE policies and procedures, including those related to confidentiality.

Please bring only necessary personal items with you to the center. You may not possess cellular telephones, watches of any type, pagers, personal digital assistants (PDAs), two-way communication devices, or notes or study materials of any kind at any time during the examination, including during breaks. These items must be stored during the examination.

Each test center contains a locked storage area with small open cubicles. Coat racks are also available. Each examinee is assigned one of the cubicles in which all personal items must be stored during the examination. Examinees are not permitted access to the cubicles at any time during the examination, including breaks. Luggage may not be stored in the center. There are no waiting facilities for spouses, family, or friends; plan to meet them elsewhere after the examination.

Wear comfortable, professional clothing and a white laboratory or clinic coat. The proctors will cover with adhesive tape anything on the laboratory coat that identifies either you or your institution.

The only piece of medical equipment you may bring is an unenhanced standard stethoscope, which is subject to inspection by test center staff. All other necessary medical equipment is provided in the examination rooms. Do not bring other medical equipment, such as reflex hammers, pen lights, or tuning forks to the test center. If you forget to bring a laboratory coat or stethoscope, a limited number of coats and stethoscopes are available at each test center. However, it is strongly recommended you bring your own.

As more fully explained in the *Bulletin of Information*, unauthorized possession of personal items while you are in the secure areas of the test center is prohibited, and unauthorized items will be taken away. However, in certain limited circumstances, exceptions to this policy may be made for medical reasons, provided that permission is granted in advance of test administration. If you believe that you have a medical condition that requires you to use medication, an external appliance, or electronic device in the secure areas of the test center, you will need to submit a written request. Information on how to submit a request is available in the USMLE *Bulletin of Information*. Examples of appliances and devices to which this policy applies include non-standard stethoscopes, (eg, electronic or digitally amplified or otherwise enhanced non-standard stethoscopes), insulin pumps, inhalers, syringes, medications (oral, inhaled, injectable), TENS units, breast pumps, hearing aids, wheelchairs, canes, crutches, and casts.

Each examination session begins with an on-site orientation. **If you arrive during the on-site orientation, you may be allowed to test; however, you will be required to sign a Late Admission Form. If you arrive after the on-site orientation, you will not be allowed to test.** You will have to reschedule your testing appointment and will be required to pay the rescheduling fee.

The clinical skills evaluation centers are secured facilities. Once you enter the secured area of the center for orientation, you may not leave that area until the examination is complete.

Throughout the examination day, staff members, wearing identifying name tags, will direct you through the examination. You must follow their instructions at all times.

### **Examination Length**

Your Step 2 CS administration will include twelve patient encounters. The examination session lasts approximately 8 hours, and two breaks are provided. The first break is 30 minutes long; the second break is 15 minutes long. You may use the restrooms before the exam and during breaks. A light meal will be served during the first break. The test center is unable to accommodate special meal requests. However, you may bring your own food, provided that no refrigeration or preparation is required. Smoking is prohibited throughout the center.

### **Equipment and Examinee Instructions**

The testing area of the clinical skills evaluation center consists of examination rooms equipped with standard examination tables, commonly used diagnostic instruments (blood pressure cuffs, otoscopes, and ophthalmoscopes), non-latex gloves, sinks, and paper towels. Examination table heights are approximately 32-33 inches, and are not adjustable. Outside each examination room is a cubicle equipped with a computer, where you can compose the patient note.

There is a one-way observation window in each examination room. These are used for quality assurance, training, and research.

Before the first patient encounter, you will be provided with a clipboard, blank paper for taking notes, and a pen. There will be an announcement at the beginning of each patient encounter. When you hear the announcement you may review the patient information posted on the examination room door (examinee instructions). You may also make notes at this time. DO NOT write on the paper before the announcement that the patient encounter has begun.

The examinee instruction sheet gives you specific instructions and indicates the patient's name, age, gender, and reason for visiting the doctor. It also indicates his or her vital signs, including heart rate, blood pressure, temperature (Celsius and Fahrenheit), and respiratory rate, unless instructions indicate otherwise. You can accept the vital signs on the examinee instruction sheet as accurate, and do not necessarily need to

repeat them unless you believe the case specifically requires it. For instance, you may encounter patient problems or conditions that suggest the need to confirm or re-check the recorded vital signs and/or perform specific maneuvers in measuring the vital signs. However, if you do repeat the vital signs, with or without additional maneuvers, you should consider the vital signs that were originally listed as accurate when developing your differential diagnosis and work-up plan.

You may encounter a case in which the examinee instructions include the results of a lab test. In this type of patient encounter the patient is returning for a follow-up appointment after undergoing testing.

### **The Patient Encounter**

When you enter the room, you will usually encounter a standardized patient. By asking this patient relevant questions and performing a focused physical examination, you will be able to gather enough information to develop a preliminary differential diagnosis and a diagnostic work-up plan.

You will be expected to communicate with the standardized patients in a professional and empathetic manner. As you would when encountering real patients, you should answer any questions they may have, tell them what diagnoses you are considering, and advise them on what tests and studies you will order to clarify their diagnoses.

The elements of medical history you need to obtain in each case will be determined by the nature of the patient's problems. Not every part of the history needs to be taken for every patient. Some patients may have acute problems, while others may have more chronic ones.

You will not have time to do a complete physical examination on every patient, nor will it be necessary to do so. Pursue the relevant parts of the examination, based on the patient's problems and other information you obtain during the history taking.

The cases are developed to present in a manner that simulates how patients present in real clinical settings. Therefore, most cases are designed realistically to present more than one diagnostic possibility. Based on the patient's presenting complaint and the additional information you obtain as you begin taking the history, you should consider all possible diagnoses and explore the relevant ones as time permits.



If you are unsuccessful at Step 2 CS and must, therefore, repeat the examination, it is possible that during your repeat examination you will see similarities to cases or patients that you encountered on your prior attempt. **Do not assume** that the underlying problems are the same or that the encounter will unfold in exactly the same way. It is best if you approach each encounter, whether it seems familiar or not, with an open mind, responding appropriately to the information provided, the history gathered, and the results of the physical examination.

### Physical Examination

You should perform physical examination maneuvers correctly and expect that there will be positive physical findings in some instances. Some may be simulated, but you should accept them as real and factor them into your evolving differential diagnoses.

You should attend to appropriate hygiene and to patient comfort and modesty, as you would in the care of real patients. Female patients will be wearing bras, which you may ask them to loosen or move if necessary for a proper examination.

With real patients in a normal clinical setting, it is possible to obtain meaningful information during your physical examination without being unnecessarily forceful in palpating, percussing, or carrying out other maneuvers that involve touching. Your approach to examining standardized patients should be no different. Standardized patients are subjected to repeated physical examinations during the Step 2 CS exam; **it is critical that you apply no more than the amount of pressure that is appropriate** during maneuvers such as abdominal examination, examination of the gall bladder and liver, eliciting CVA tenderness, examination of the ears with an otoscope, and examination of the throat with a tongue depressor.

You should interact with the standardized patients as you would with any patients you may see with similar problems. The only exception is that certain parts of the physical examination **MUST NOT BE DONE**: rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations. If you believe one or more of these examinations are indicated, you should include them in your proposed diagnostic work-up. All other examination maneuvers are completely acceptable, including femoral pulse exam, inguinal node exam, back exam, and axillary exam.

Another exception is that you should not swab the standardized patient's throat for a throat culture. If you believe that this diagnostic/laboratory test is indicated, include it on your proposed diagnostic workup.

Excluding the restricted physical examination maneuvers, you should assume that you have consent to do a physical examination on all standardized patients, **unless you are explicitly told not to do so** as part of the examinee instructions for that case.

Announcements will tell you when to begin the patient encounter, when there are 5 minutes remaining, and when the patient encounter is over. In some cases you may complete the patient encounter in fewer than 15 minutes. If so, you may leave the examination room early, but you are not permitted to re-enter. **Be certain that you have obtained all necessary information before leaving the examination room.** Re-entering an examination room after leaving will be considered misconduct.

### Telephone Patient Encounters

Telephone patient encounters begin like all encounters; you will read a doorway instruction sheet that provides specific information about the patient. As with all patient encounters, as soon as you hear the announcement that the encounter has begun, you may make notes about the case before entering the examination room.

When you enter the room, sit at the desk in front of the telephone.

- Do not dial any numbers.
- Push the speaker button above the yellow dot on the phone to be connected to the patient caregiver or patient.
- You will be permitted to make only one phone call.
- Do not touch any buttons on the phone until you are ready to end the call – touching any buttons may disconnect you.
- To end the call on a phone case, press the speaker button above the yellow dot.
- You will not be allowed to call back after you end the call.

Obviously, physical examination of the patient is not possible for telephone encounters, and will not be required. However, for these cases, as for all others, you will have relevant information and instructions and will be able to take a history and ask questions. As with other cases, you will write a patient note after the encounter. Because no physical examination is possible for telephone cases, leave that section of the patient note blank.

### The Patient Note

Immediately after each patient encounter, you will have 10 minutes to complete a patient note. **Note: If you leave the patient encounter early, you may use the additional time for the note.** You will be asked to handwrite or type (on a computer) a patient note similar to the medical record you would compose after seeing a patient in a clinic, office, or emergency department.

You should record pertinent medical history and physical examination findings obtained during the encounter, as well as your initial differential diagnoses. Finally, you will list the diagnostic studies you would order next for that particular patient. If you think a rectal, pelvic, inguinal hernia, genitourinary, female breast, or corneal reflex examination, or a throat swab, would have been indicated in the encounter, list it as part of your diagnostic workup. **Treatment, consultations, or referrals should not be included in your work-up plan.**

Appendix A illustrates a blank patient note page similar to what you will be asked to complete if you write the note by hand. Appendix B illustrates a blank patient note screen similar to what would appear to examinees who choose to type their notes. Appendix C provides sample patient note styles. A program for practicing typing the patient note is available on the USMLE website ([www.usmle.org](http://www.usmle.org)).

Typically you will be able to choose, for each patient encounter, whether to write the patient note by hand or type it on a computer. Occasionally, due to technical or administration problems, the option of typing the patient note may not be available for one or more patient encounters. When this happens, examinees will be required to write their patient notes by hand.

All examinees should be prepared for the possibility that they may have to write one or more patient notes by hand.

Patient notes are rated by physicians who are well trained at reading notes and can interpret most handwriting. However, extreme illegibility will be a problem and can adversely impact a score. Everyone who writes patient notes by hand should make them as legible as possible.

If you have a case for which you think no diagnostic workup is necessary, write "No studies indicated" rather than leaving that section blank.

You will not receive credit for listing examination procedures you **WOULD** have done or questions you **WOULD** have asked had the encounter been longer. Write **ONLY** the information you elicited from the patient through either physical examination or history taking.

When you hear the announcement to stop writing, put down your pen **immediately** or click "Submit" on the computer. Continuing to write after the announcement to stop will be considered misconduct. Remain seated until all examinees' patient notes have been collected.

### Other Case Formats

The kinds of medical problems that your patients will portray are those you would commonly encounter in a clinic, doctor's office, emergency department, or hospital setting. Although there are no young children presenting as patients, there may be cases in which you encounter—either in the examination room or via the telephone—a parent or caregiver of a child.

In some instances you may be instructed to perform a physical examination that relates to a specific medical condition, life circumstance, or occupation. Synthetic models, mannequins, or simulators provide an appropriate format for assessment of sensitive examination skills such as genital or rectal examination, and may be used for these cases. In such cases, specific instructions regarding the use of these devices will be provided. If you encounter any case for which you decide no physical examination is necessary, leave that section of the patient note blank.

## TESTING REGULATIONS AND RULES OF CONDUCT

### **You cannot discuss the cases with your fellow examinees, during breaks or at any time.**

Conversation among examinees in languages other than English about any subject is strictly prohibited at all times, including during breaks. Test center staff will be with you to monitor activity. To maintain security and quality assurance, each examination room is equipped with video cameras and microphones to record every patient encounter.

The USMLE program retains the right to remove any examinee from the examination who appears to represent a health or safety risk to the standardized patients or staff of a clinical skills evaluation center. This includes, but is not limited to, examinees who appear ill, are persistently coughing or sneezing, have open skin lesions, or have evidence of active bleeding. Examinees who are not feeling well are encouraged to seek medical advice prior to arrival at the center and, if consistent with medical advice, should consider rescheduling the date of their examination. This can be done at the website of your registration entity.

Clinical skills evaluation center staff monitor all testing administrations for the Step 2 CS examination. You must follow instructions of test center staff throughout the examination. Failure to do so may result in a determination of irregular behavior. The USMLE *Bulletin of Information* provides a complete description of irregular behavior and the consequences of a finding of irregular behavior. You must become familiar with the *Bulletin of Information* before you take your examination.

Irregular behavior includes any action by applicants, examinees, potential applicants, or others when solicited by an applicant and/or examinee that subverts or attempts to subvert the examination process. Specific examples of irregular behavior include, but are not limited to:

- ☐ Seeking and/or obtaining unauthorized access to examination materials;
- ☐ Providing false information or making false statements on application forms or other USMLE-related documents;
- ☐ Taking an examination without being eligible for it or attempting to do so;
- ☐ Impersonating an examinee or engaging someone else to take the examination for you;

- ☐ Giving, receiving, or obtaining unauthorized assistance during the examination or attempting to do so;
- ☐ Making notes of any kind during the examination, except on the blank paper provided to you;
- ☐ Failure to adhere to any USMLE policy, procedure or rule, including instructions of the test center staff;
- ☐ Disruptive or unprofessional behavior at the test center;
- ☐ Interacting with any standardized patient outside of that standardized patient's given case portrayal, before, during, or after the examination;
- ☐ Conversing with other Step 2 CS examinees in any language other than English at any time while at the test center;
- ☐ Possessing unauthorized materials, including notes and study guides, photographic equipment, communication or recording devices, pagers, cellular phones, watches of any type, and personal digital assistants (PDAs) during any part of the testing session, including during breaks;
- ☐ Altering or misrepresenting examination scores;
- ☐ Any unauthorized reproduction by any means, including reconstruction through memorization and/or dissemination of copyrighted examination materials and examination content (this includes the reproduction and dissemination of examination content on the Internet, email, and listservs);
- ☐ Providing or attempting to provide any information, including that relating to examination content, that may give or attempt to give unfair advantage to individuals who may be taking the examination;
- ☐ Engaging in behaviors that could constitute a real or potential threat to a patient's safety, such as careless or dangerous actions during physical examination.

Instances of possible irregular behavior are thoroughly investigated and actions may be taken under the USMLE policies and procedures on irregular behavior. Please refer to the appropriate USMLE *Bulletin of Information* for Rules of Conduct and Irregular Behavior.

## SCORING THE STEP 2 CS EXAMINATION

Step 2 CS is designed to evaluate your ability to gather information that is important for a given patient presentation. During your physical examination of the standardized patient, you should attempt to elicit important positive and negative signs. Make sure you discuss with the patient your initial diagnostic impression and work-up plan. The patients may ask questions concerning their complaints. You should address each patient's concern as you would in a normal clinical setting.

The ability to communicate effectively with patients, demonstrating appropriate interpersonal skills, is essential to safe and effective patient care. Step 2 CS is intended to determine whether physicians seeking an initial license to practice medicine in the United States, regardless of country of origin, can communicate effectively with patients. Carefully developed rating scales, as well as intensive training in their use, are used by the standardized patients to assess communication, interpersonal skills, and English-speaking skills.

Your ability to document in the patient note the findings from the patient encounter, diagnostic impression, and initial patient work-up will be rated by physician raters. You will be rated based upon the quality of documentation of important positive and negative findings from the history and physical examination, as well as your listed differential diagnoses and diagnostic assessment plans. As is the case with other aspects of Step 2 CS scoring, physician raters receive intensive training and monitoring to ensure consistency and fairness in rating.

### Scoring of the Step 2 Clinical Skills Subcomponents

USMLE Step 2 CS is a pass/fail examination. Examinees are scored in three separate subcomponents: Integrated Clinical Encounter (ICE), Communication and Interpersonal Skills (CIS), and Spoken English Proficiency (SEP). Each of the three subcomponents must be passed in a single administration in order to achieve a passing performance on Step 2 CS.

The ICE subcomponent includes assessment of:

- ◆ Data gathering – patient information collected by history taking and physical examination
- ◆ Documentation – completion of a patient note summarizing the findings of the patient encounter, diagnostic impression, and initial patient work-up

Data gathering is scored by checklists completed by the standardized patients. The checklists are developed by committees of clinicians and medical school clinical faculty and comprise the essential history and physical examination elements for specific clinical encounters. The patient note is scored by trained physician raters. Copies of the patient note template, sample patient note styles, and software to practice typing the note are available on the USMLE website. (See also Appendices A – C.)

The CIS subcomponent includes assessment of:

- ◆ Questioning skills – examples include:
  - use of
    - open-ended questions, transitional statements, facilitating remarks
  - avoidance of
    - leading or multiple questions, repeat questions unless for clarification, medical terms/jargon unless immediately defined, interruptions when the patient is talking
  - accurately summarizing information from the patient
- ◆ Information-sharing skills – examples include:
  - acknowledging patient issues/concerns and clearly responding with information
  - avoidance of medical terms/jargon unless immediately defined
  - clearly providing
    - counseling when appropriate
    - closure, including statements about what happens next
- ◆ Professional manner and rapport – examples include:
  - asking about
    - expectations, feelings, and concerns of the patient

- support systems and impact of illness, with attempts to explore these areas
- showing
  - consideration for patient comfort during the physical examination
  - attention to cleanliness through hand washing or use of gloves
- providing opportunity for the patient to express feelings/concerns
- encouraging additional questions or discussion
- making
  - empathetic remarks concerning patient issues/concerns
  - patient feel comfortable and respected during the encounter

CIS performance is assessed by the standardized patients, who provide a global rating of these skills using a series of generic rating scales. The domains included in these scales are, in part, based upon the scales used in the former Clinical Skills Assessment (CSA) of the Educational Commission for Foreign Medical Graduates, with enhancements based upon national consensus statements on essential communication skills and upon review of other commonly used rating forms.

The SEP subcomponent includes assessment of:

- ◆ Clarity of spoken English communication within the context of the doctor-patient encounter (eg, pronunciation, word choice, and minimizing the need to repeat questions or statements)

SEP performance is assessed by the standardized patients using rating scales and is based upon the frequency of pronunciation or word choice errors that affect comprehension, and the amount of listener effort required to understand the examinee's questions and responses.

## Step 2 CS Score Report Schedule

Step 2 CS examinees are grouped into testing periods according to the dates on which they test. The first results for a given testing period will be issued on the first day of the corresponding reporting period, and it is expected that results for the vast majority of examinees who take the exam during the testing period will be reported on this date. However, it is important to note that there will likely be a small number of examinees for whom scoring and quality assurance are not completed by the first day of the reporting period; these will typically be examinees who took the exam in the latter part of the testing period. Results for these examinees will be reported each week throughout the reporting period, and should be reported no later than the last day of the score reporting period.

This schedule allows USMLE staff to enhance the quality assurance and data collection/scoring procedures performed prior to score reporting. Additionally, it provides examinees, as well as others who rely on Step 2 CS results, with guidelines regarding when a result will be reported for a given exam date. These guidelines allow examinees to plan their exam registration and scheduling in order to have their results in time to meet specific deadlines, such as those related to graduation or participation in the National Resident Matching Program (NRMP), or "the Match." Information about testing periods and corresponding reporting periods is available at [http://www.usmle.org/Examinations/step2/step2cs\\_reporting.html](http://www.usmle.org/Examinations/step2/step2cs_reporting.html).

# EXHIBIT 2



# UNITED STATES MEDICAL LICENSING EXAMINATION™ (USMLE™)

## Step 2 Clinical Skills

### Applicant's Request for Test Accommodations

In order to submit a request for test accommodations for USMLE Step 2 CS :

- Complete and submit the USMLE Step 2 CS Registration form Parts A and B.
- Review the current Content Description and General Information available at [www.usmle.org](http://www.usmle.org). This information will orient you to the exam format.
- Complete the Step 2 CS Applicant's Request for Test Accommodations.

In order to have your request processed without delay you **MUST**:

1. Provide **supporting documentation** verifying your functional impairment. Supporting documentation should be submitted unbound. Please see documentation submission information on page 5. In order to document your need for accommodation as completely as possible, please attach:

- Evaluation reports of appropriate professionals printed on letterhead and signed by the evaluator(s). Psychoeducational testing should be reported using **age norms** for all measures where available.
- Primary documentation (report cards, teacher notes, behavioral observations, medical records, etc.)
- A personal statement describing your disability and its impact on your daily life and educational functioning. Do not confine your comments to standardized test performance. Please discuss your overall functioning in both academic and non-academic settings.

2. Provide **specific request(s)** for test accommodations:

- Test accommodations may be provided on one or more section of Step 2 CS. Sections of the exam include:
  1. Exam orientation
  2. Patient encounter
  3. Patient note
- You must document a functional impairment that substantially impacts the tasks required for a specific section of the examination in order to be considered for accommodations on that section of the examination.

Please note these **important facts**:

- NBME will acknowledge receipt of your request and audit your documentation for completeness. If your request does not include sufficient documentation of a current substantial functional impairment to warrant review, you will receive **written notice** of the documentary deficiencies and will be required to provide additional documentation.
- Submitting insufficient documentation with your request for test accommodations **may substantially lengthen the decision making process regarding your request.**
- Information regarding the granting or denial of test accommodations will NOT be released via telephone. **All official communications regarding your request will be made in writing.** Should you wish to modify or withdraw a request for test accommodations, please contact Disability Services at 215-590-9509.

**All official communications regarding requests for test accommodations, including final decisions, will be communicated in writing only.**

Please type or print legibly.

**Section A: Biographical Information**

1. Name: Hartman Aaron L  
Last First Middle Initial

2. Gender: Male Female

3. Date of Birth: 4/6/82

4. SS# 075-66-8256  
(if known)

5. USMLE # 5-171-535-7

5. A. Permanent

Address: 30 Great Oak Road

Street

Saint James

City

NY

State/Province

11780

Zip/Postal Code

USA

Country

(631) 862-6510

Daytime Telephone Number

Alternate Telephone Number

AHartmanMD@hotmail.com

E-mail address

B. Temporary/  
Mailing

Use this address from:   /  /   to   /  /  

Address:

Street

City

State/Province

Zip/Postal Code

Country

Daytime Telephone Number

Alternate Telephone Number

E-mail address

6. Medical School: SUNY Stony Brook School of Medicine



**Section B: Nature of Disability**

7. Indicate the **nature of the disability** and the year it was first professionally diagnosed (select all that apply):

## Sensory Impairments:

☐ Hearing Disability \_\_\_\_\_

☐ Visual Disability \_\_\_\_\_

## Learning Impairments:

☐ Reading Disability \_\_\_\_\_

☐ Writing Disability \_\_\_\_\_

☐ Other: \_\_\_\_\_

## Language Impairments:

☐ Receptive Language Disorder \_\_\_\_\_

☒ Expressive Language Disorder \_\_\_\_\_

☐ Mixed Receptive/Expressive Language Disorder \_\_\_\_\_

☐ Other: \_\_\_\_\_

1989 (I began receiving treatment in 1989, but I do not have records from then)

## Medical Impairments:

☐ Mobility/Motor \_\_\_\_\_

☐ Diabetes/Thyroid Dysfunction \_\_\_\_\_

☐ Epilepsy/Neurological \_\_\_\_\_

☐ Other: \_\_\_\_\_

## Mental Health /Executive Function Impairments:

☐ Anxiety Disorder \_\_\_\_\_

☐ Attention Deficit Hyperactivity Disorder \_\_\_\_\_

☐ Other: \_\_\_\_\_
**Section C: Accommodations Information**

- Accommodation(s) must be appropriate to the disability
- For each accommodation requested indicate the section(s) of the examination you believe is affected (i.e., orientation, patient encounter, patient note)
- If you are requesting additional testing or break time, please indicate the amount of additional time requested in minutes (DO NOT indicate time in multiples of standard time, such as time and one half, double time, etc.)

8. What accommodation(s) are you requesting?

A. Section of Exam:

Patient encounter

Accommodation Requested:

Extended time (2x time)

B. Section of Exam:

Accommodation Requested:

C. Section of Exam:

Accommodation Requested:

9. Do you require wheelchair access at the examination facility?

☐ yes☒ no

If you require an adjustable height table, please indicate the number of inches from the floor: \_\_\_\_\_

**Section D: Accommodation History**

10. Prior classroom or test accommodations that you have received:

A. Standardized Examinations

☐ yes☒ no**Medical College Admission Test (MCAT):**

Month/Year \_\_\_\_\_

Accommodation received \_\_\_\_\_

(If extra time, note amount given \_\_\_\_\_)

**Other:**

Month/Year \_\_\_\_\_

Accommodation received \_\_\_\_\_

(If extra time, note amount given \_\_\_\_\_)

B. Medical School

☒ yes☐ no

Accommodation received

Clinic: Extended time for oral exams. For objective standardized clinical exams, I was given 2x time to complete a History + Physical on a simulated patient.

Classroom: \_\_\_\_\_

Date Approved 8/9/07

If yes, have an appropriate official at your medical school complete the Certification of Prior Test Accommodations form.

C. College

☐ yes☒ no

If yes, accommodations received \_\_\_\_\_

D. Secondary or elementary school

☐ yes☒ no

If yes, accommodations received \_\_\_\_\_

**11. Authorization (You must sign and date this item in order to have your request processed)**

I authorize the National Board of Medical Examiners (NBME) to contact the entities identified in Section D of this request form, and the professionals identified in the documentation I am submitting in connection with it, to obtain any or all of the following: confirmation, clarification, and/or further information. I authorize such entities and professionals to provide NBME with all requested confirmation, clarification, and further information.

Signature: \_\_\_\_\_

*Oliver Hartman*

Date: \_\_\_\_\_

*7/11/08***DO NOT SUBMIT:**

- Original documents; keep the original and submit a copy
- Research articles, resumes, curriculum vitas
- Handwritten letters from physicians or evaluators
- Handwritten letters from physicians or evaluators
- Documentation previously submitted to Disability Services
- Documentation previously submitted to your registration entity
- Previous correspondence from Disability Services
- Multiple copies of documentation (i.e., faxed and mailed copies of a document)
- Staples, clips, binders, page protectors, folders, or similar items

*Please note that submitting duplicate documentation and/or bound documentation may delay a decision regarding your request as all documentation must be processed.*

**DO SUBMIT:**

- Legible copies
- All documents in English. You are responsible for providing certified English translations of foreign-language documentation
- Typed or printed letters and reports from evaluators
- Documentation from childhood if you are requesting accommodations based on a developmental disorder, i.e. LD, ADHD, Dyslexia
- Documentation of your functional impairment in activities beyond test-taking
- Documentation of your functional impairment beyond self-report

**Mail your completed questionnaire and documents to:**

**Students / Graduates of US & Canadian Medical Schools**  
**Testing Coordinator, Disability Services, National Board of Medical Examiners,**  
**3750 Market Street, Philadelphia, PA 19104-3190.**  
**215-590-9509**

**Students / Graduates of International Medical Schools**  
**Test Accommodations Coordinator, Educational Commission for Foreign Medical Graduates**  
**3624 Market Street, Philadelphia, PA 19104 USA.**

**Please keep a copy of your completed request form for your records.**

Applicant Name: Aaron Hartman

USMLE ID#: 5-171-535-7

1. I, Latha Chandran MD, hold the position Associate Dean, Academic & Faculty  
Name Title Affairs
2. I certify that S.U.N.Y Stony Brook School of Medicine has officially approved and provided  
Name of Institution
- the following test accommodations for the above applicant beginning on Aug 9, 2007  
Date (Month/Year)

Accommodation(s) provided: Extended time for oral exams. Specifically, for objective standardized clinical examinations Aaron was given 2x time to complete a History + Physical on a simulated patient encounter.

Reason for provision of accommodation(s): Aaran was evaluated by a  
certified speech pathologist and found to have moderate stuttering  
 He was also evaluated by our disabilities office for appropriate  
accommodations

Signature Latha Chandran Date 8/30/07

Signature Latha Chandra Date 8/30/07

(631) 446-1025

Telephone Number

Students / Graduates of US & Canadian Med. Schools	Students / Graduates of Foreign Medical Schools
<p><u>Mail or fax* this form to:</u>          Testing Coordinator, Disability Services          National Board of Medical Examiners          3750 Market Street          Philadelphia, PA 19104-3190</p>	<p><u>Mail or fax this form to:</u>          Test Accommodations Coordinator          Educational Commission for Foreign Medical Graduates          3624 Market Street          Philadelphia, PA 19104 USA</p>
<p>Fax Number: (215) 590-9422 * (call to verify receipt)          Phone Number: (215) 590-9509</p>	<p>Fax Number: (215) 386-6327          Phone Number: (215) 386-5900</p>



**Personal Statement**  
**Step 2 CS Exam Accommodation Request**

*Impact on Daily Life*

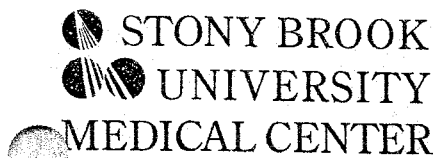
I have stuttered for most of my childhood and all of my adulthood. During high school, its impact on my daily life was most pronounced. I was extremely self-conscious, and I participated minimally in extracurricular activities that would require speaking. I avoided speaking in large groups whenever possible, and I refused to speak on the telephone. Also during high school, I began to develop secondary physical characteristics of the stutter in which I would make strange facial movements. For example, I would stick my tongue out of my mouth. Encounters with strangers were particularly difficult because they did not know what was wrong with me. In many instances, I would be asked "Are you okay?". This made me feel extremely uncomfortable.

During college and medical school, as I became more comfortable with myself, the stutter began to have less impact on my life. My friends were very understanding, and during the majority of the time, it did not influence my daily activities. However, I continued to avoid using the telephone in exchange for online sources of communication (e.g. e-mail and instant messenger). The stutter is the worst during times of stress. When it becomes very difficult to speak, I tend to avoid speaking on the telephone altogether and interacting with my friends. After the stressor has passed, within time the stutter begins to dissipate. Even during times of minimal stress, my greatest challenge is speaking on the telephone. This has been a constant struggle for me.

*Impact on Educational Functioning*

I have stuttered throughout my entire educational career. During high school, I avoided speaking in front of the class. In some instances, I asked the teachers not to call on me. During college, as I became more confident in myself, I slowly started to speak more in class. I asked more questions during lecture, rather than wait until the end of class. During the first two years of medical school, I continued to ask questions during lectures (except during times of high stress). During clinical examinations (similar to Step 2 CS), I began to have major difficulties in speaking. This was the first time in my educational career that I was judged based on my ability to communicate with another person, and I had a lot of anxiety about the situation. At first, I tried to do the clinical examination within the normal time interval, but I found that the stress of having to perform a history and physical examination in a specified amount of time made it very difficult for me to speak. After undergoing a speech evaluation by a speech pathologist, the medical school granted me double time for the clinical examinations. Even though I continued to use the entire time for the examination, I was able to complete the history and physical examination on the patient.





*Speech, Language, and  
Hearing Program*

**Speech Pathology**  
**Speech/Fluency Evaluation**

**Name:** Hartman, Aaron  
**MRN:** 30183243

**DOB:** 04/06/82  
**DOE:** 5/14/07

Mr. Hartman is a 25 year-old male who was referred by Dr. Gerald Hartman to assess his fluency skills based on the diagnosis of stuttering. The history was obtained from Mr. Hartman, who states that his dysfluency is a daily interference with communication, both professionally and personally. Mr. Hartman reported that requires extra time to communicate with others due to his dysfluency. He is a medical student at SUNY- Stony Brook

**Pertinent History**

Mr. Hartman has had no major medical concerns other than having had ear infections in his youth and required tubes to be placed. Mr. Hartman does wear glasses. Pt. reported seeing speech therapists in the past, which he was treated from first grade to eighth grade and then in high school he attended a 3 week intensive program. He did state that he learned several compensatory strategies that seemed to help with dysfluent events. He reported he said he has dysfluent events often and seems to be worse when he is reading aloud.

**Oral Exam**

Mr. Hartman presented with appropriate facial symmetry, labial function was judged to be within normal limits for strength, protrusion, retraction and ROM/agility. Lingual function was judged to be within normal limits for strength, protrusion, retraction, lateralization, elevation, depression and ROM/agility. Mr. Hartman had adequate natural dentition. Good velar elevation upon phonation.

**Voice**

Mr. Hartman demonstrated a good vocal quality with adequate pitch/intonation, appropriate loudness and resonance. Maximum phonation time was > 12 seconds and ventilatory/phonatory coordination was judged to be within normal limits. There were no concerns regarding his vocal ability.

### Speech

Overall intelligibility was judged to be within normal limits, with the exception of dysfluent events in which some sounds would be slightly distorted due to sound prolongation. No dysarthria or apraxic characteristics were apparent during this evaluation.

### Fluency

The formal test Stuttering Severity Instrument-3 (SSI-3) was used to measure and quantify Mr. Hartman's dysfluent speech patterns. The following scores were obtained: frequency score of 17; duration score of 8 and physical concomitants score of 5 with a total overall score of 30. Pt. obtained a percentile score of 48% and a severity rating of moderate.

Specifically this test showed that the frequency of dysfluent speech occurred more in versus a reading task versus spontaneous speaking tasks. During a reading task of adult level 228 syllables it took him 53 seconds to read this aloud versus in normal time 12-13 seconds. The duration of the average length of the three longest stuttering events was recorded to be 3 seconds each occurrence

The physical concomitants included facial grimaces such as jaw muscles tensing and lip pressing as well as poor eye contact. Pt. demonstrated sound prolongation, part word repetitions and interjections in his dysfluent events.

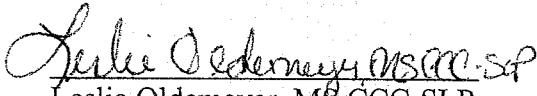
### Impressions

Mr. Hartman is a 25 year old gentleman with a history of dysfluent speech in which he has obtained prior speech therapy to treat this. He has no major medical issues or disorders and is in relatively good health. His oral motor revealed good strength and rate of movement for labial and lingual structures. Vocal parameters were judged to be within normal limits and no concerns were voiced from the patient or observed during this evaluation. Pt's speech was observed to be within normal limits as well, no dysarthria or apraxia was apparent. In regards to his dysfluent speech, the SSI-3 was used and his dysfluency was obtained at a percentile of 48% and a severity rating of moderate. Mr. Hartman was noted to take longer amounts of time to speech in extended utterances due to halting speech and occasional sound prolongation. For example, during a reading task of adult level 228 syllables it took him 53 seconds to read this aloud versus in normal time 12-13 seconds. Pt. demonstrated sound prolongation, part word repetitions and interjections in his dysfluent events. He also displayed accompanying physical concomitants such as jaw muscles tensing, lip pressing and poor eye contact when speaking.



Recommendations

1. Pt. requires more time to verbally communicate to familiar and unfamiliar listeners due to his dysfluencies, including halting speech and sound repetition.
2. Pt. may benefit from speech therapy to reinforce techniques to compensate. If he chooses to go with treatment he will be referred to a specialized speech language pathologist with intensive stuttering intervention techniques to adequately treat Mr. Hartman's dysfluency.

  
Leslie Oldemeyer, MS CCC-SLP  
Speech Pathologist

# EXHIBIT 3

October 31, 2008

**Cover Letter**

I am requesting an amendment to my current accommodation for Step 2 CS. Currently, I have been granted an extra 8 minutes for each patient encounter due to a stutter. I would also like to request the use of a TTY (teletypewriter) device for use on any telephone patient encounter. A TTY device allows me to type what I want to say and have a third party relay the message to the listener. I currently use an Ameriphone Q90D device, which hooks up with any regular telephone connection. As long as the telephone can reach an outside line, it should work. If you accept my request, I am willing to bring my own device to the exam, but please let me know in advance.

Please see the attached document from my speech therapist, which provides evidence that speaking on the telephone would not be an effective mode of communication for me.

  
\_\_\_\_\_  
Aaron Hartman

## UNITED STATES MEDICAL LICENSING EXAMINATION™ (USMLE™)

### Step 2 Clinical Skills

### Applicant's Request for Test Accommodations

In order to submit a request for test accommodations for USMLE Step 2 CS :

- Complete and submit the USMLE Step 2 CS Registration form Parts A and B
- Review the current Content Description and General Information available at [www.usmle.org](http://www.usmle.org). This information will orient you to the exam format.
- Complete the Step 2 CS Applicant's Request for Test Accommodations.

In order to have your request processed without delay you **MUST**:

1. Provide supporting documentation verifying your functional impairment. Supporting documentation should be submitted unbound. Please see documentation submission information on page 5. In order to document your need for accommodation as completely as possible, please attach:

- Evaluation reports of appropriate professionals printed on letterhead and signed by the evaluator(s). Psychoeducational testing should be reported using **age norms** for all measures where available.
- Primary documentation (report cards, teacher notes, behavioral observations, medical records, etc.)
- A personal statement describing your disability and its impact on your daily life and educational functioning. Do not confine your comments to standardized test performance. Please discuss your overall functioning in both academic and non-academic settings.

2. Provide specific request(s) for test accommodations:

- Test accommodations may be provided on one or more section of Step 2 CS. Sections of the exam include:  

1. Exam orientation	2. Patient encounter	3. Patient note
---------------------	----------------------	-----------------
- You must document a functional impairment that substantially impacts the tasks required for a specific section of the examination in order to be considered for accommodations on that section of the examination.

Please note these important facts:

- NBME will acknowledge receipt of your request and audit your documentation for completeness. If your request does not include sufficient documentation of a current substantial functional impairment to warrant review, you will receive written notice of the documentary deficiencies and will be required to provide additional documentation.
- Submitting insufficient documentation with your request for test accommodations may substantially lengthen the decision making process regarding your request.
- Information regarding the granting or denial of test accommodations will NOT be released via telephone. All official communications regarding your request will be made in writing. Should you wish to modify or withdraw a request for test accommodations, please contact Disability Services at 215-590-9509.

**All official communications regarding requests for test accommodations, including final decisions, will be communicated in writing only.**

Please type or print legibly.

**Section A: Biographical Information**

1. Name: Hartman Aaron L  
Last First Middle Initial

2. Gender: Male Female

3. Date of Birth: 4/6/82

4. SS# 0 7 5 - 6 6 - 8 1 5 6  
(if known)

5. USMLE # 5 - 1 7 1 - 5 3 5 - 7

5. A. Permanent Address: 30 Great Oak Road  
Street  
Saint James NY 11780  
City State/Province Zip/Postal Code  
USA  
Country  
(631) 862-6510  
Daytime Telephone Number  
Alternate Telephone Number  
A.Hartman.MD@hotmail.com  
E-mail address

B. Temporary/ Mailing Address: Use this address from:   /  /   to   /  /  

Street  
City State/Province Zip/Postal Code  
Country  
Daytime Telephone Number  
Alternate Telephone Number  
E-mail address

6. Medical School: SUNY Stony Brook School of Medicine

**Section B: Nature of Disability**

7. Indicate the **nature of the disability** and the **year** it was first professionally diagnosed (select all that apply):

## Sensory Impairments:

☐ Hearing Disability \_\_\_\_\_

☐ Visual Disability \_\_\_\_\_

## Learning Impairments:

☐ Reading Disability \_\_\_\_\_

☐ Writing Disability \_\_\_\_\_

☐ Other: \_\_\_\_\_

## Language Impairments:

☐ Receptive Language Disorder \_\_\_\_\_

☐ Mixed Receptive/Expressive Language Disorder \_\_\_\_\_

☒ Expressive Language Disorder

☐ Other: \_\_\_\_\_

1989 (I began receiving treatment in 1989, but I do not have records from then)

## Medical Impairments:

☐ Mobility/Motor \_\_\_\_\_

☐ Epilepsy/Neurological \_\_\_\_\_

☐ Diabetes/Thyroid Dysfunction \_\_\_\_\_

☐ Other: \_\_\_\_\_

## Mental Health /Executive Function Impairments:

☐ Anxiety Disorder \_\_\_\_\_

☐ Attention Deficit Hyperactivity Disorder \_\_\_\_\_

☐ Other: \_\_\_\_\_
**Section C: Accommodations Information**

- Accommodation(s) must be appropriate to the disability
- For each accommodation requested indicate the section(s) of the examination you believe is affected (i.e., orientation, patient encounter, patient note)
- If you are requesting additional testing or break time, please indicate the amount of additional time requested in minutes (DO NOT indicate time in multiples of standard time, such as time and one half, double time, etc.)

8. What accommodation(s) are you requesting?

## A. Section of Exam:

Patient encounter

## Accommodation Requested:

Use of a TTY (teletypewriter) device for use on any telephone patient encounter



B. Section of Exam:

Accommodation Requested:

C. Section of Exam:

Accommodation Requested:

9. Do you require wheelchair access at the examination facility?

☐ yes

☒ no

If you require an adjustable height table, please indicate the number of inches from the floor: \_\_\_\_\_

#### Section D: Accommodation History

10. Prior classroom or test accommodations that you have received:

A. Standardized Examinations

☒ yes

☐ no

Medical College Admission Test (MCAT):

Month/Year \_\_\_\_\_

Accommodation received \_\_\_\_\_

(If extra time, note amount given \_\_\_\_\_)

Other: USMLE Step 2 CS

Month/Year \_\_\_\_\_

Accommodation received For Step 2 CS I have been approved to receive an extra 8 minutes during the patient encounter.

(If extra time, note amount given 8 extra minutes)

B. Medical School

☒ yes

☐ no

Accommodation received

Clinic: Extended time for oral exams. For objective standardized clinical exams, I was given 20 time to complete a history + physical on a simulated patient.

Classroom: \_\_\_\_\_

Date Approved 8/9/07

If yes, have an appropriate official at your medical school complete the Certification of Prior Test Accommodations form.

C. College

☐ yes

☒ no

If yes, accommodations received \_\_\_\_\_

D. Secondary or elementary school

☐ yes☒ no

If yes, accommodations received \_\_\_\_\_

**11. Authorization (You must sign and date this item in order to have your request processed)**

I authorize the National Board of Medical Examiners (NBME) to contact the entities identified in Section D of this request form, and the professionals identified in the documentation I am submitting in connection with it, to obtain any or all of the following: confirmation, clarification, and/or further information. I authorize such entities and professionals to provide NBME with all requested confirmation, clarification, and further information.

Signature: Aaron Hartman Date: 10/31/08**DO NOT SUBMIT:**

- Original documents; keep the original and submit a copy
- Research articles, resumes, curriculum vitas
- Handwritten letters from physicians or evaluators
- Handwritten letters from physicians or evaluators
- Documentation previously submitted to Disability Services
- Documentation previously submitted to your registration entity
- Previous correspondence from Disability Services
- Multiple copies of documentation (i.e., faxed and mailed copies of a document)
- Staples, clips, binders, page protectors, folders, or similar items

*Please note that submitting duplicate documentation and/or bound documentation may delay a decision regarding your request as all documentation must be processed.*

**DO SUBMIT:**

- Legible copies
- All documents in English. You are responsible for providing certified English translations of foreign-language documentation
- Typed or printed letters and reports from evaluators
- Documentation from childhood if you are requesting accommodations based on a developmental disorder, i.e. LD, ADHD, Dyslexia
- Documentation of your functional impairment in activities beyond test-taking
- Documentation of your functional impairment beyond self-report

**Mail your completed questionnaire and documents to:**

**Students / Graduates of US & Canadian Medical Schools**  
**Testing Coordinator, Disability Services, National Board of Medical Examiners,**  
**3750 Market Street, Philadelphia, PA 19104-3190.**  
**215-590-9509**

**Students / Graduates of International Medical Schools**  
**Test Accommodations Coordinator, Educational Commission for Foreign Medical Graduates**  
**3624 Market Street, Philadelphia, PA 19104 USA.**

**Please keep a copy of your completed request form for your records.**



The Suffolk Center for Speech Therapy  
215 Hallock Rd  
Stony Brook, NY 11790

To Whom It May Concern:

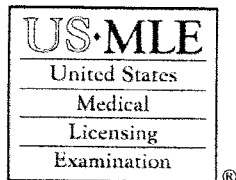
I have been working with Mr. Aaron Hartman for several months to improve his speech fluency. Testing has demonstrated that Aaron typically experiences a high level of dysfluencies (including sound blocks, prolongations and repetitions) during conversation. These difficulties are more pronounced when he is speaking on the telephone. This characteristic is common in individuals who experience dysfluencies. Throughout the course of several phone conversations with Aaron, he has demonstrated sound blocks lasting several seconds. Aaron has reported that, during such pauses, the listener is often confused and may hang up, believing that the connection has been lost. Aaron would greatly benefit from adaptation of examinations involving telephone conversations, as this is not an effective mode of communication for him at this time.

Sincerely,

A handwritten signature in dark ink, reading "Emily McCafferty". The script is cursive and fluid, with the first name "Emily" and last name "McCafferty" clearly distinguishable.

Emily McCafferty, M.S., CCC-CLP

# EXHIBIT 4



## UNITED STATES MEDICAL LICENSING EXAMINATION®

## STEP 2 CLINICAL SKILLS (CS) SCORE REPORT

This score report is provided for the use of the examinee.

Third-party users of USMLE information are advised to rely solely on official USMLE transcripts.

**Hartman, Aaron**

**USMLE ID: 5-171-535-7**

**Test Date: June 26, 2009**

The USMLE is a single examination program consisting of three Steps designed to assess an examinee's understanding of and ability to apply concepts and principles that are important in health and disease and that constitute the basis of safe and effective patient care. Step 2 is designed to assess whether an examinee can apply medical knowledge, skills, and understanding of clinical science essential for the provision of patient care under supervision, including emphasis on health promotion and disease prevention. The inclusion of Step 2 in the USMLE sequence is intended to ensure that due attention is devoted to principles of clinical sciences and basic patient-centered skills that provide the foundation for the safe and competent practice of medicine. There are two components to Step 2: a Clinical Knowledge (CK) examination and a Clinical Skills (CS) examination. This report represents results for the Step 2 CS examination only. Results of the examination are reported to medical licensing authorities in the United States and its territories for use in granting an initial license to practice medicine. The overall Pass/Fail outcome provided below represents your result for the administration of the Step 2 CS on the test date shown above.

<i>Overall Pass/Fail Outcome</i>
<b>FAIL +</b>

The overall outcome for Step 2 CS, reported above, is based upon the minimum passing levels set by USMLE for the three Step 2 CS subcomponents. The three subcomponents are Integrated Clinical Encounter (ICE), Communication and Interpersonal Skills (CIS), and Spoken English Proficiency (SEP). It is necessary to pass all three subcomponents in order to obtain an overall passing outcome on the Step 2 CS. Results for the three Step 2 CS subcomponents are reported below.

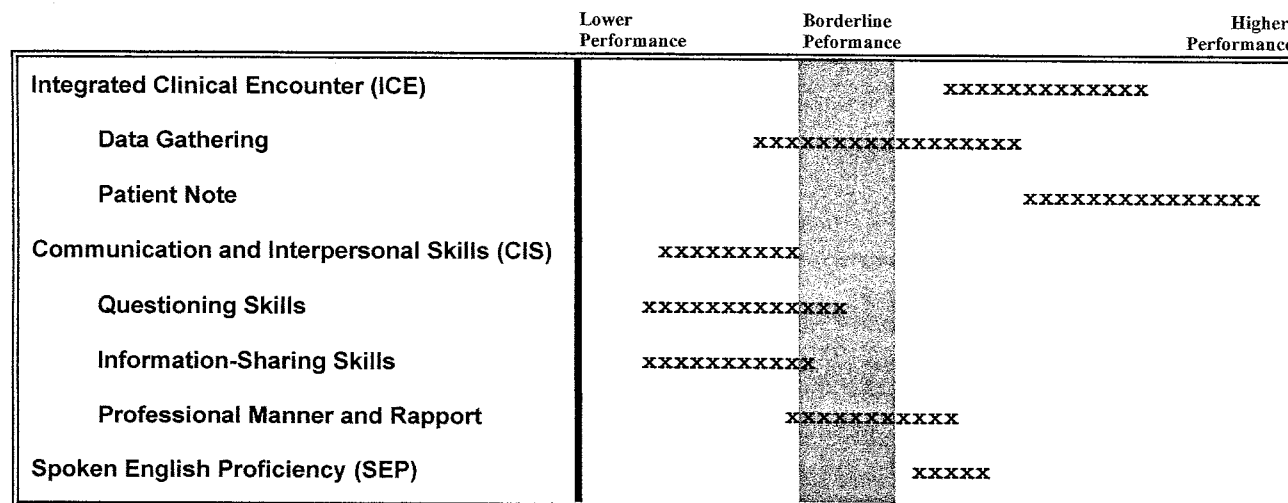
<i>ICE</i>	<i>CIS</i>	<i>SEP</i>
<b>PASS</b>	<b>FAIL</b>	<b>PASS</b>

*+Following review and approval of your written request, testing accommodations were provided during the administration of this examination. A similar annotation will be included on your USMLE transcript.*

**INFORMATION PROVIDED FOR EXAMINEE USE ONLY**

The Performance Profile below is provided solely for the benefit of the examinee.

These profiles are developed as self-assessment tools for examinees only and will not be reported or verified to any third party.

**USMLE STEP 2 CS PERFORMANCE PROFILE**

The above Performance Profile is provided to aid in self-assessment. The shaded area defines a borderline level of performance for each subcomponent (ICE, CIS, SEP); borderline performance is comparable to a HIGH FAIL/LOW PASS on the subcomponent.

For the ICE subcomponent, additional information is provided for Data Gathering and for the Patient Note. Data Gathering represents performance on history-taking and physical examination tasks. Patient Note represents performance on completion of the post-encounter summaries. For the CIS subcomponent, additional information is provided for Questioning Skills, Information-Sharing Skills, and Professional Manner and Rapport.

Performance bands indicate areas of relative strength and weakness. Some bands are wider than others. The width of a performance band reflects the precision of measurement: narrower bands indicate greater precision. The band width for a given content area is the same for all examinees. An asterisk indicates that your performance band extends beyond the displayed portion of the scale. Small differences in the location of bands should not be over interpreted. If two bands overlap, performance in the associated areas should be interpreted as similar.

Additional information concerning the Step 2 CS subcomponents can be found in the *USMLE Step 2 CS Content Description and General Information Booklet*.

# EXHIBIT 5

UNITED STATES MEDICAL LICENSING EXAMINATION™ (USMLE™)  
Form for Requesting Subsequent Test Accommodations  
(Step 2 CS only)

I have received test accommodations for a prior administration of USMLE Step 2 CS and am requesting the previously provided accommodations for the administration for which I am currently registered. (Submitting this form constitutes your official notification. Arrangements will be made once your application is processed.)

☒ I require different accommodations than those previously provided to me on USMLE Step 2 CS, due to a change in the nature or extent of my disability. (Submitting this form constitutes your official notification. We will review your request and advise you in writing of the decision.)

If there has been a change in the nature or extent of your disability please fill out the Step 2 CS Applicant's Request for Test Accommodations and attach documentation supporting the change in accommodations.

Name: Aaron Hartman

Current mailing address: 30 Great Oak Road, Saint James, NY 11780

Daytime telephone number (631) 862-6510

Email Address: AHartmanMD@hotmail.com

USMLE ID# 5-171-535-7

Social Security or National ID# 075-66-8256

Signature Aaron Hartman

Date 9/16/09

**DO NOT SUBMIT:**

- Original documents; keep the original and submit a copy
- Research articles, resumes, curriculum vitas
- Handwritten letters from physicians or evaluators
- Documentation previously submitted to Disability Services
- Documentation previously submitted to your registration entity
- Previous correspondence from Disability Services
- Multiple copies of documentation (i.e., faxed and mailed copies of a document)
- Staples, clips, binders, page protectors, folders, or similar items

*Please note that submitting duplicate documentation and/or bound documentation may delay a decision regarding your request as all documentation must be processed.*

Mail or fax this form to:

Testing Coordinator, Disability Services  
National Board of Medical Examiners  
3750 Market Street  
Philadelphia, PA 19104-3190  
Fax Number (215) 590-9422  
Phone Number (215) 590-9509

*If you fax your form, please be sure to telephone Disability Services to verify receipt.*

**Step 2 Clinical Skills**  
**Applicant's Request for Test Accommodations**

In order to submit a request for test accommodations for USMLE Step 2 CS :

- Complete and submit the USMLE Step 2 CS Registration form Parts A and B
- Review the current Content Description and General Information available at [www.usmle.org](http://www.usmle.org). This information will orient you to the exam format.
- Complete the Step 2 CS Applicant's Request for Test Accommodations.

In order to have your request processed without delay you **MUST**:

1. Provide supporting documentation verifying your functional impairment. Supporting documentation should be submitted unbound. Please see documentation submission information on page 5. In order to document your need for accommodation as completely as possible, please attach:

- Evaluation reports of appropriate professionals printed on letterhead and signed by the evaluator(s). Psychoeducational testing should be reported using **age norms** for all measures where available.
- Primary documentation (report cards, teacher notes, behavioral observations, medical records, etc.)
- A personal statement describing your disability and its impact on your daily life and educational functioning. Do not confine your comments to standardized test performance. Please discuss your overall functioning in both academic and non-academic settings.

2. Provide specific request(s) for test accommodations:

- Test accommodations may be provided on one or more section of Step 2 CS. Sections of the exam include:
  1. Exam orientation
  2. Patient encounter
  3. Patient note
- You must document a functional impairment that substantially impacts the tasks required for a specific section of the examination in order to be considered for accommodations on that section of the examination.

Please note these important facts:

- NBME will acknowledge receipt of your request and audit your documentation for completeness. If your request does not include sufficient documentation of a current substantial functional impairment to warrant review, you will receive written notice of the documentary deficiencies and will be required to provide additional documentation.
- Submitting insufficient documentation with your request for test accommodations may substantially lengthen the decision making process regarding your request.
- Information regarding the granting or denial of test accommodations will NOT be released via telephone. All official communications regarding your request will be made in writing. Should you wish to modify or withdraw a request for test accommodations, please contact Disability Services at 215-590-9509.

**All official communications regarding requests for test accommodations,  
including final decisions, will be communicated in writing only.**



Please type or print legibly.

**Section A: Biographical Information**

1. Name: Hartman Aaron L  
Last First Middle Initial

2. Gender: Male Female

3. Date of Birth: 04/06/82

4. SS# 0 7 5 - 6 6 - 8 2 5 6 5. USMLE # 5 - 1 7 1 - 5 3 5 - 7  
(if known)

5. A. Permanent Address: 30 Great Oak Road  
Street  
Saint James NY 11780  
City State/Province Zip/Postal Code  
United States  
Country  
(631) 862-6510  
Daytime Telephone Number  
Alternate Telephone Number  
AHartmanMD@hotmail.com  
E-mail address

B. Temporary/ Mailing Address: Use this address from:   /  /   to   /  /    
Address:  
Street  
City State/Province Zip/Postal Code  
Country  
Daytime Telephone Number  
Alternate Telephone Number  
E-mail address

6. Medical School: SUNY Stony Brook School of Medicine



**Section B: Nature of Disability**

7. Indicate the nature of the disability and the year it was first professionally diagnosed (select all that apply):

Sensory Impairments:

☐ Hearing Disability \_\_\_\_\_

☐ Visual Disability \_\_\_\_\_

Learning Impairments:

☐ Reading Disability \_\_\_\_\_

☐ Writing Disability \_\_\_\_\_

☐ Other: \_\_\_\_\_

Language Impairments:

☐ Receptive Language Disorder \_\_\_\_\_

☒ Expressive Language Disorder 1989

☐ Mixed Receptive/Expressive Language Disorder \_\_\_\_\_

☐ Other: \_\_\_\_\_

Medical Impairments:

☐ Mobility/Motor \_\_\_\_\_

☐ Diabetes/Thyroid Dysfunction \_\_\_\_\_

☐ Epilepsy/Neurological \_\_\_\_\_

☐ Other: \_\_\_\_\_

Mental Health /Executive Function Impairments:

☐ Anxiety Disorder \_\_\_\_\_

☐ Attention Deficit Hyperactivity Disorder \_\_\_\_\_

☐ Other: \_\_\_\_\_

**Section C: Accommodations Information**

- Accommodation(s) must be appropriate to the disability
- For each accommodation requested indicate the section(s) of the examination you believe is affected (i.e., orientation, patient encounter, patient note)
- If you are requesting additional testing or break time, please indicate the amount of additional time requested in minutes (DO NOT indicate time in multiples of standard time, such as time and one half, double time, etc.)

8. What accommodation(s) are you requesting?

A. Section of Exam:

Patient encounter

Accommodation Requested:

I would like to type my questions and responses to the SP via a laptop computer and have an orator verbalize what I type to the SP. I would also like the SP rating scales to be modified so that the use of an orator would not negatively impact my score.

B. Section of Exam: Patient encounter

Accommodation Requested: Substitution of a patient encounter for any telephone case (\*this has previously been approved\*)

C. Section of Exam:

Accommodation Requested:

9. Do you require wheelchair access at the examination facility?

☐ yes

☒ no

If you require an adjustable height table, please indicate the number of inches from the floor: \_\_\_\_\_

#### Section D: Accommodation History

10. Prior classroom or test accommodations that you have received:

A. Standardized Examinations

☒ yes

☐ no

Medical College Admission Test (MCAT):

Month/Year \_\_\_\_\_

Accommodation received \_\_\_\_\_

(If extra time, note amount given \_\_\_\_\_)

Other: USMLE Step 2 CS

Month/Year June 2009

8 extra minutes during each patient encounter; substitution of a patient encounter for a telephone case.

(If extra time, note amount given 8 minutes)

B. Medical School

☒ yes

☐ no

Accommodation received

Extended time for oral exams. For objective standardized clinical exams (OSCEs), I was given 2x time to complete a patient encounter.

Classroom: \_\_\_\_\_

Date Approved 8/9/07

If yes, have an appropriate official at your medical school complete the Certification of Prior Test Accommodations form.

C. College

☐ yes

☒ no

If yes, accommodations received \_\_\_\_\_

D. Secondary or elementary school

☐ yes☒ no

If yes, accommodations received \_\_\_\_\_

**11. Authorization (You must sign and date this item in order to have your request processed)**

I authorize the National Board of Medical Examiners (NBME) to contact the entities identified in Section D of this request form, and the professionals identified in the documentation I am submitting in connection with it, to obtain any or all of the following: confirmation, clarification, and/or further information. I authorize such entities and professionals to provide NBME with all requested confirmation, clarification, and further information.

Signature: Adrian HartmanDate: 9/16/09**DO NOT SUBMIT:**

- Original documents; keep the original and submit a copy
- Research articles, resumes, curriculum vitas
- Handwritten letters from physicians or evaluators
- Handwritten letters from physicians or evaluators
- Documentation previously submitted to Disability Services
- Documentation previously submitted to your registration entity
- Previous correspondence from Disability Services
- Multiple copies of documentation (i.e., faxed and mailed copies of a document)
- Staples, clips, binders, page protectors, folders, or similar items

*Please note that submitting duplicate documentation and/or bound documentation may delay a decision regarding your request as all documentation must be processed.*

**DO SUBMIT:**

- Legible copies
- All documents in English. You are responsible for providing certified English translations of foreign-language documentation
- Typed or printed letters and reports from evaluators
- Documentation from childhood if you are requesting accommodations based on a developmental disorder, i.e. L.D., ADHD, Dyslexia
- Documentation of your functional impairment in activities beyond test-taking
- Documentation of your functional impairment beyond self-report

**Mail your completed questionnaire and documents to:**

**Students / Graduates of US & Canadian Medical Schools**  
**Testing Coordinator, Disability Services, National Board of Medical Examiners,**  
**3750 Market Street, Philadelphia, PA 19104-3190.**  
**215-590-9509**

**Students / Graduates of International Medical Schools**  
**Test Accommodations Coordinator, Educational Commission for Foreign Medical Graduates**  
**3624 Market Street, Philadelphia, PA 19104 USA.**

**Please keep a copy of your completed request form for your records.**

The Suffolk Center for Speech Therapy  
215 Hallock Rd  
Stony Brook, NY 11790  
September 17, 2009

National Board of Medical Examiners  
3750 Market Street  
Philadelphia, PA 19104-3190

To Whom It May Concern:

Aaron Hartman has been a client of mine for several months. He has been receiving fluency therapy at a frequency of once per week. In therapy we have targeted improving Aaron's overall fluency, and although he has had improvements in the therapy setting, he has experienced great difficulty transferring his skills to outside environments.

Aaron's speech is characterized by severe dysfluencies in the form of blocks, prolongations, and repetitions of initial sounds as well as sounds within words. These blocks can last up to several seconds, and are often accompanied by secondary characteristics such as jaw tension and blinking. Due to his dysfluencies, Aaron requires a greater amount of time to verbally communicate a message. When Aaron is experiencing elevated stress levels, his dysfluencies become significantly more pronounced. With increased stress comes increased tension of the articulators, lengthening and worsening dysfluencies and making communication more difficult.

Upon receiving his scores for his medical licensing exam, Aaron reviewed them with me during therapy. He was extremely disappointed and concerned with his scores. Weeks ago, in the controlled and low-stress atmosphere of the therapy setting, Aaron had practiced for the upcoming test with this clinician. He was able at that time to demonstrate skills that are outlined in the scoring guidelines, such as asking open-ended questions, summarizing, and describing the next steps. However, as previously mentioned, dysfluencies worsen with stress. Due to the timed nature and high-stress atmosphere of this test, it is my professional opinion that oral communication with the actor-patients is an ineffective and inappropriate method of measuring Aaron's communication skills. Even given the accommodation of extra time, I would not expect Aaron to physically be able to complete such an activity at this time.

Literature demonstrates that listeners are inclined to make a false judgment about a speaker who is dysfluent, believing that the speaker's dysfluencies represent the halting and difficult speech that the listener, a non-stutterer, might use if he were uncertain or unqualified. Such literature illustrates the need for an alternative method of communication. When an actor-patients completes his evaluation of Aaron, his opinion of Aaron's clinical skills are likely to be negatively biased by Aaron's oral speech patterns.

To conclude, the medical licensing exam, as described by Aaron and understood by this clinician, must make reasonable accommodations for Mr. Hartman to ensure that his skills are accurately and fairly assessed. In my opinion, merely providing him with extended time will not lessen his anxiety, resultant dysfluencies, or the negative impression that his speech pattern may make on the actor-patient evaluating him. Aaron is a lovely person and will be a credit to the medical community.

I thank you for your time and attention to this matter. With any further questions, please contact me at [mccaffertye@rsufsd.org](mailto:mccaffertye@rsufsd.org).

Yours,

A handwritten signature in cursive script, appearing to read "E. McCafferty".

Emily McCafferty, M.S., CCC/SLP

September 17, 2009

Testing Coordinator, Disability Services  
National Board of Medical Examiners  
3750 Market Street  
Philadelphia, PA 19104-3190

RE: USMLE Step 2 CS

USMLE ID# 5-171-535-7

Dear Testing Coordinator,

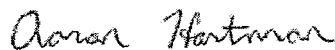
I completed the USMLE Step 2 CS examination on June 26, 2009 for which I was approved for two accommodations: (1) an additional eight minutes on each patient encounter and (2) substitution of a patient encounter for any telephone encounter. I was approved for these accommodations secondary to a severe stutter. On August 19, 2009, I discovered that I failed the examination because I did not pass the *Communication and Interpersonal Skills* (CIS) subcomponent of the exam. I passed the other two subcomponents: *Integrated Clinical Encounter* (ICE) and *Spoken English Proficiency* (SEP). Upon reviewing the performance profile, it seems that the areas that I did poorest on were: Data Gathering, Questioning Skills, and Information-Sharing Skills, all of which were assessed by the standardized patient and require the examinee to communicate with the standardized patient. My stutter is a serious problem which I have tried very hard to overcome with years of speech therapy, but during times of extreme stress my dysfluency becomes much worse. In a speech evaluation dated 5/14/07 which I submitted to the disability services, it says "during a reading task of adult level 228 syllables it took him 53 seconds to read this aloud versus in normal time 12-13 seconds." In other words, I read 4x slower than "normal." In addition, speaking freely, it is often more difficult for me to speak, and thus it could take me even longer to verbalize my thoughts. Thus, I believe asking me to complete a history and physical exam in 1.5x time was not an appropriate accommodation.

I have reapplied for the Step 2 CS examination with alternative accommodations: I would like to type my questions and responses to the SP via a laptop computer and have an orator verbalize what I type to the SP. I would also like the SP rating scales to be modified so that the use of an orator would not negatively impact my score. I believe that trying to assess my communication and interpersonal skills using verbal means would not be an accurate evaluation. Please see the accompanying documentation from my speech therapist. Moreover, the "Scoring The Step 2 CS Examination" from the USMLE website does not say that the CIS subcomponent assesses verbal communication.

I realize that my request presents a problem for the "Spoken English Proficiency" component of the exam. I understand that it is important for the NBME to assess this component, and I can offer several solutions. One solution might be to have the SPs ask me one question related to their problem and I would have unlimited time to answer this question. For example, at the end of each case, I could verbally close the encounter and tell them what will happen next. Another potential solution is to use the SEP scores from my original exam in place of a retest of this component.

Unfortunately, due to time-constraints, I need to retake this examination by November 7, 2009, in order to get the results in time to apply for residency programs. I would ask that you expedite the review of my accommodation request and allow me to schedule the Step 2 CS exam as soon as possible.

Sincerely,



Aaron Hartman